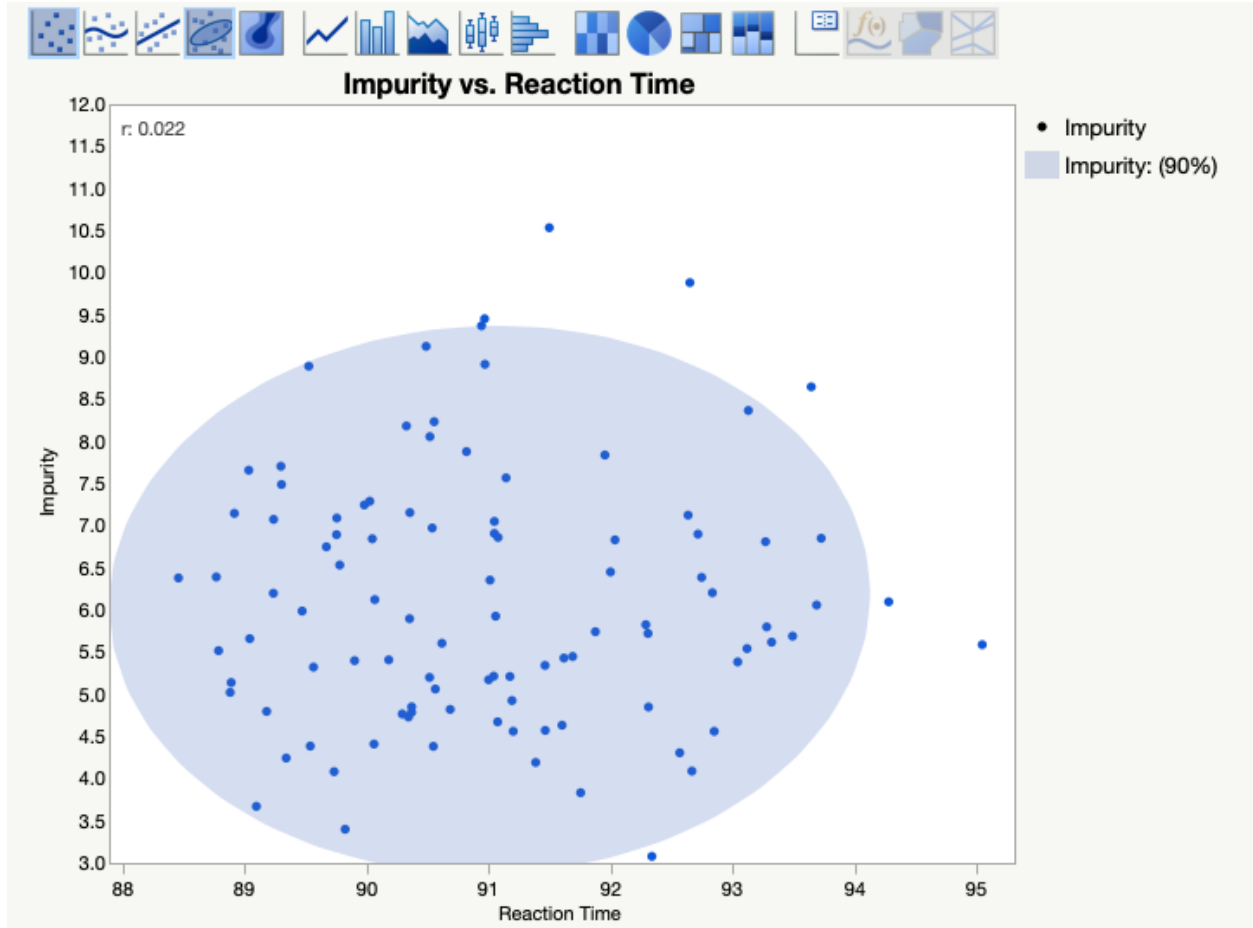


## IMPURITY DATA



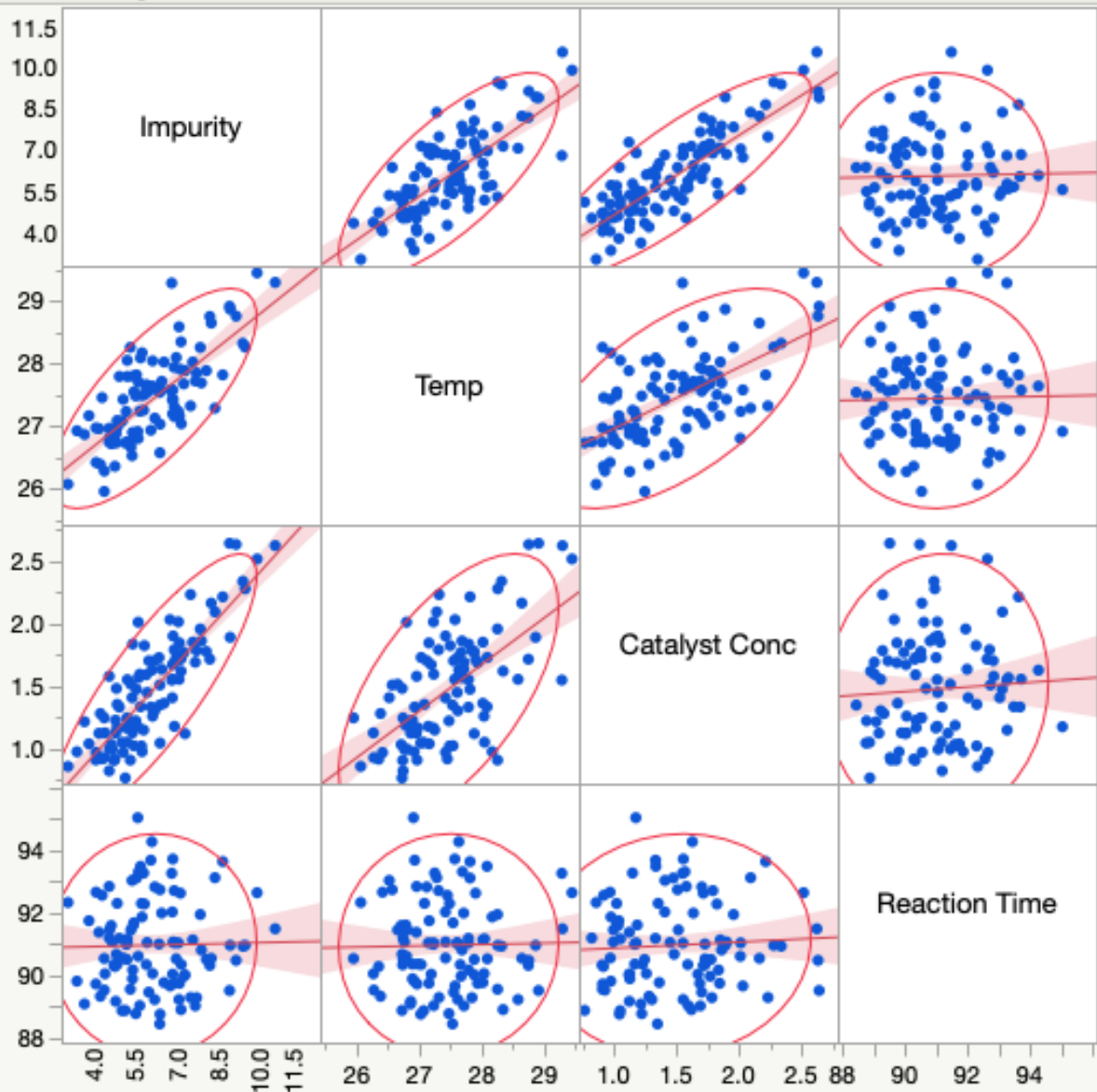
## Multivariate

### Correlations

	Impurity	Temp	Catalyst Conc	Reaction Time
Impurity	1.0000	0.7463	0.8381	0.0217
Temp	0.7463	1.0000	0.6048	0.0207
Catalyst Conc	0.8381	0.6048	1.0000	0.0600
Reaction Time	0.0217	0.0207	0.0600	1.0000

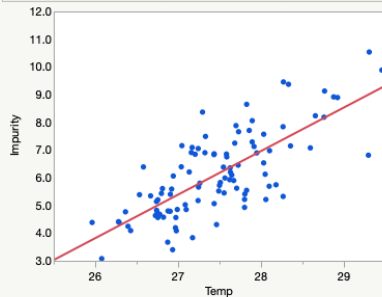
The correlations are estimated by Row-wise method.

### Scatterplot Matrix



## Fit Group

### Bivariate Fit of Impurity By Temp



— Linear Fit

#### Linear Fit

$$\text{Impurity} = -37.08493 + 1.5730975 \cdot \text{Temp}$$

#### Summary of Fit

RSquare	0.556901
RSquare Adj	0.55238
Root Mean Square Error	1.013063
Mean of Response	6.123247
Observations (or Sum Wgts)	100

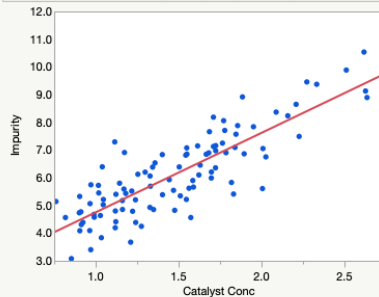
#### Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	126.40877	126.409	123.1697
Error	98	100.57714	1.026	<b>Prob &gt; F</b>
C. Total	99	226.98592		<b>&lt;.0001*</b>

#### Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob> t
Intercept	-37.08493	3.894583	-9.52	<b>&lt;.0001*</b>
Temp	1.5730975	0.141744	11.10	<b>&lt;.0001*</b>

### Bivariate Fit of Impurity By Catalyst Conc



— Linear Fit

#### Linear Fit

$$\text{Impurity} = 1.879327 + 2.8695134 \cdot \text{Catalyst Conc}$$

#### Summary of Fit

RSquare	0.702462
RSquare Adj	0.699426
Root Mean Square Error	0.830152
Mean of Response	6.123247
Observations (or Sum Wgts)	100

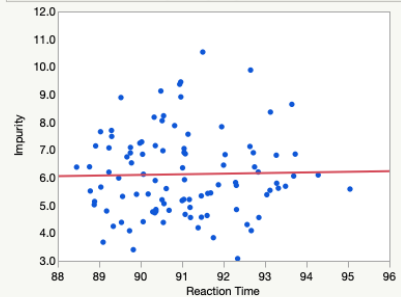
#### Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	159.44895	159.449	231.3696
Error	98	67.53696	0.689	<b>Prob &gt; F</b>
C. Total	99	226.98592		<b>&lt;.0001*</b>

#### Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob> t
Intercept	1.879327	0.291095	6.46	<b>&lt;.0001*</b>
Catalyst Conc	2.8695134	0.188649	15.21	<b>&lt;.0001*</b>

### Bivariate Fit of Impurity By Reaction Time



— Linear Fit

#### Linear Fit

$$\text{Impurity} = 4.0692956 + 0.0225688 \cdot \text{Reaction Time}$$

#### Summary of Fit

RSquare	0.00047
RSquare Adj	-0.00973
Root Mean Square Error	1.521543
Mean of Response	6.123247
Observations (or Sum Wgts)	100

#### Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.10667	0.10667	0.0461
Error	98	226.87925	2.31509	<b>Prob &gt; F</b>
C. Total	99	226.98592		0.8305

#### Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob> t
Intercept	4.0692956	9.570116	0.43	0.6716
Reaction Time	0.0225688	0.105143	0.21	0.8305